

Amendments to Claims

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of Claims

1. (Currently Amended) A fluid analyzer comprising:
a pre-concentrator having a plurality of parallel channels; [[and]]
a concentrator connected to the pre-concentrator; [[and]]
a first separator connected to the concentrator;
a second separator connected to the first separator;
a first pump connected to the pre-concentrator; and
a second pump connected to the second separator.
2. (Original) The analyzer of claim 1, further comprising a first plurality of heater elements situated in the concentrator.
3. (Canceled)
4. (Currently Amended) The analyzer of claim [[3]] 2, further comprising a second plurality of heater elements in the channels of the pre-concentrator.
5. (Original) The analyzer of claim 4, further comprising a controller connected to the first and second pluralities of heater elements for providing a concentrated heat pulse.
- 6-7. (Canceled)

8. (Currently Amended) The analyzer of claim [[7]] 5, further comprising at least one detector situated between an input of the pre-concentrator and the second pump.

9. (Original) The analyzer of claim 8, wherein the concentrated heat pulse moves through the concentrator.

10-20. (canceled)

21. (Currently Amended) A fluid analyzer comprising:

a pre-concentrator having a plurality of parallel channels, the channels having an adsorbing film length of less than 1.0 cm;

a concentrator connected to the pre-concentrator;

a first separator connected to the concentrator; and

a controller connected to the pre-concentrator, the concentrator, and the first separator, the controller configured to activate and de-activate the pre-concentrator, concentrator, and first separator independently.

22. (Previously Presented) The fluid analyzer of claim 21, further comprising a first pump connected to the pre-concentrator.

23. (Previously Presented) The fluid analyzer of claim 22, further comprising a second pump connected to the second separator.

24. (Previously Presented) The fluid analyzer of claim 23, wherein the controller is connected to the first and second pumps, wherein the controller is configured to operate the first and second pumps simultaneously or separately.

25. (Previously Presented) The fluid analyzer of claim 21, further comprising a plurality of heater elements in the pre-concentrator channels.

26. (Previously Presented) The fluid analyzer of claim 23, further comprising at least one detector disposed between an input of the pre-concentrator and the second pump.

27. (Currently Amended) A fluid analyzer comprising:
a pre-concentrator having a plurality of parallel channels;
a concentrator connected to the pre-concentrator;
a first separator connected to the concentrator;
a first plurality of heater elements in the channels of the pre-concentrator; and
a controller connected to the heater elements, the controller configured to energize
the heater elements in a time phased sequence such that each of the plurality of heater elements becomes heated and desorbs selected constituents into a sample fluid stream at about a time when an upstream concentration pulse, produced by one or more upstream heater elements, reaches the heater element, providing a concentrated heat pulse.

28. (Previously Presented) The fluid analyzer of claim 27, further comprising a second plurality of heater elements situated in the concentrator.

29. (Previously Presented) The fluid analyzer of claim 27, further comprising a second separator connected to the first separator.

30. (Previously Presented) The fluid analyzer of claim 27, wherein the controller is connected to the second plurality of heater elements, wherein the controller is configured to energize the first and second pluralities of heater elements to provide a concentrated heat pulse.

Application Serial No. 10/672,483
Response to Office Action mailed June 4, 2007
Amendment dated September 4, 2007

31. (Previously Presented) The fluid analyzer of claim 27, further comprising at least one detector disposed between an input of the pre-concentrator and the second pump.